Abstract of the Disclosure

Maximum Clique in a Graph

5   A method and system for maximizing connectivity within members of a group, or for example a clique, in polynomial time. Vertices representing inter-connectivity of each member are placed on a graph in descending order. Least connected members are systematically removed from the graph until the connectivity count of a least connected vertex is equal to a quantity of vertices remaining in the graph. Following the removal of a vertex from the graph, an

10   update of the inter-connectivity of each member on the graph is performed. Accordingly, when the connectivity count of a least connected vertex is equal to a quantity of vertices remaining in the graph a clique with maximum inter-connectivity has been achieved.